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MEMORANDUM

TO: Lynda Deschambault, Remedial Project Manager
Site Cleanup Section 1, SFD-7-1

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00405090 Amendment 2

DATE: December 14, 2009

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Omega Chem OU2
Site Account No.:	09 BC QB02
CERCLIS ID NO.:	CAD042245001
Case No.:	38940
SDG No.:	Y5129
Laboratory:	KAP Technologies, Inc. (KAP)
Analysis:	Semivolatiles Selective Ion Monitoring (SIM)
Samples:	2 Ground Water Samples (see Case Summary)
Collection Date:	September 15, 2009
Reviewer:	Santiago Lee, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Ray Flores, CLP PO USEPA Region 6
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] Attention [ ] Action

SAMPLING ISSUES: [X] Yes [ ] No

Data Validation Report - Tier 3

Case No.: 38940
SDG No.: Y5129
Site: Omega Chem OU2
Laboratory: KAP Technologies, Inc. (KAP)
Reviewer: Santiago Lee, ESAT/LDC
Date: December 14, 2009

I. CASE SUMMARY

Sample Information

Samples:	Y5129 and Y5130
Concentration and Matrix:	Low Concentration Water
Analysis:	Semivolatiles SIM
SOW:	SOM01.2
Collection Date:	September 15, 2009
Sample Receipt Date:	September 17, 2009
Extraction Date:	September 20, 2009
Analysis Date:	October 6, 2009

Field QC

Field Blanks (FB):	Not provided
Equipment Blanks (EB):	Not provided
Background Samples (BG):	Not provided
Field Duplicates (D1):	Not provided

Laboratory QC

Method Blanks & Associated Samples:

SBLK27:	Y5129 and Y5130

Tables

1A: Analytical Results with Qualifications
1B: Data Qualifier Definitions for Organic Data Review

CLP PO Action

None.

CLP PO Attention

Results for pentachlorophenol are qualified as estimated (J) due to low relative response factors (RRFs) in initial calibration and continuing calibration verifications (CCVs) (see Comment A).

Sampling Issues

1. The sampler signature is missing on the traffic report and chain of custody record (TR/COC) (refer to page 4 in the data package).

2. No sample was designated for "laboratory QC" on the TR/COC and the matrix spike/matrix spike duplicate (MS/MSD) analysis was not performed. Consequently, the matrix-specific accuracy and precision could not be evaluated.

Additional Comments

The laboratory performed manual integrations on calibrations due to incorrect auto integration. Manual integrations were reviewed and found to be satisfactory and in compliance with proper integration techniques.

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services Volatile and Semivolatile Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration,* SOM01.1, May 2005;
- *Modifications Updating SOM01.1 to SOM01.2,* Amended April 11, 2007; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review,* June 2008.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Holding Time/Preservation	Yes	
2.	GC/MS Tune/GC Performance	Yes	
3.	Initial Calibration	No	A
4.	Continuing Calibration Verification	No	A
5.	Laboratory Blanks	Yes	
6.	Field Blanks	N/A	
7.	Deuterated Monitoring Compounds	Yes	
8.	Matrix Spike/Matrix Spike Duplicate	N/A	
9.	Laboratory Control Sample/Duplicate	N/A	
10.	Internal Standards	Yes	
11.	Compound Identification	Yes	
12.	Compound Quantitation	Yes	
13.	System Performance	Yes	
14.	Field Duplicate Sample Analysis	N/A	

N/A = Not Applicable

III. VALIDITY AND COMMENTS

A. Results for the following analyte are qualified as estimated due to low RRFs in initial calibration and CCVs and are flagged "J" in Table 1A.

- Pentachlorophenol in samples Y5129 and Y5130 and method blank SBLK27

An RRF of 0.0338 was reported for pentachlorophenol in the initial calibration. RRFs of 0.0390 and 0.0370 were reported for pentachlorophenol in 10/06/09 16:11 and 18:53 CCVs, respectively. These values are below the 0.050 validation criterion. Since qualified results are nondetected, false negatives may exist.

The RRF evaluates instrument sensitivity and is used in the quantitation of target analytes.

ANALYTICAL RESULTS

Table 1A

Case No. : 38940 SDG No. : Y5129

Site : OMEGA CHEM OU2

Lab : KAP Technologies, Inc.

Reviewer : Santiago Lee, ESAT/LDC

Date : 12/14/09

QUALIFIED DATA

Concentration in ug/L

Analysis Type : Low Level Water Samples for Semivolatiles SIM

Station Location :	67			68			Method Blank			CRQL								
Sample ID :	Y5129			Y5130			SBLK27											
Collection Date :	9/15/2009			9/15/2009														
Dilution Factor :	1.0			1.0			1.0											
Semivolatiles SIM	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Naphthalene	0.12			0.16			0.10U			0.10								
2-Methylnaphthalene	0.10U			0.10U			0.10U			0.10								
Acenaphthylene	0.10U			0.10U			0.10U			0.10								
Acenaphthene	0.10U			0.10U			0.10U			0.10								
Fluorene	0.10U			0.10U			0.10U			0.10								
Pentachlorophenol	0.20U	J	A	0.20U	J	A	0.20U	J	A	0.20								
Phenanthrene	0.10U			0.10U			0.10U			0.10								
Anthracene	0.10U			0.10U			0.10U			0.10								
Fluoranthene	0.10U			0.10U			0.10U			0.10								
Pyrene	0.10U			0.10U			0.10U			0.10								
Benzo(a)anthracene	0.10U			0.10U			0.10U			0.10								
Chrysene	0.10U			0.10U			0.10U			0.10								
Benzo(b)fluoranthene	0.12			0.12			0.10U			0.10								
Benzo(k)fluoranthene	0.10U			0.10U			0.10U			0.10								
Benzo(a)pyrene	0.10U			0.10U			0.10U			0.10								
Indeno(1,2,3-cd)pyrene	0.11			0.12			0.10U			0.10								
Dibenzo(a,h)anthracene	0.16			0.17			0.10U			0.10								
Benzo(g,h,i)perylene	0.13			0.14			0.10U			0.10								

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation LImit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

U The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.

L Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

J The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.

R The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.